This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. **(Previously Presented)** A thermoforming multilayer film comprising successively, in said film,

- at least one layer chosen from layers (A1) and (A2) with the provision that (A2) is present in said at least one layer and
- is placed next to a layer (B1),
- a layer (B2),
- a layer (B3),
- an optional layer (B4),

wherein said layer (A1) comprises a fluoropolymer (A111) or a polymer (A112) consisting essentially of alkyl(meth)acrylate units or a blend of the two,

said layer (A2) consists essentially of ink,

said layer (B1) comprises a fluoropolymer (B111) or a polymer (B112) consisting essentially of alkyl(meth)acrylate units or a blend of the two, said layer (B2) is based on polyamide with amine end groups, said layer (B3) consists essentially of a polyolefin functionalized with an unsaturated carboxylic anhydride, and

said optional layer (B4) if present comprises polyolefin.

2. **(Previously Presented)** A thermoforming multilayer film comprising:

a layer (A11)

a layer (A12)

a layer (A2) consisting essentially of ink

a layer (B2)

a layer (B3)

an optional layer (B4)

said layer (B1) comprises a fluoropolymer (B111) or a polymer (B112) consisting essentially of alkyl(meth)acrylate units or a blend of the two, said layer (B2) is based on polyamide with amine end groups, said layer (B3) consists essentially of a polyolefin functionalized with an unsaturated carboxylic anhydride, and

said optional layer (B4) if present comprises polyolefin

the order of the layers being as follows:

- (A11), + (A12), + (A2), + (B1), + (B2), + (B3), + and optional (B4) wherein (A11) comprises a fluoropolymer (A111) or a polymer (A112) consisting essentially of alkyl(meth)acrylate units or a blend of (A111) and (A112); and layer (A12) comprises by weight 0 to 50% of (A111) and 50 to 100% of (A112).

3. (Previously Presented) The film according to claim 1, comprising (B111) or (A111) and wherein said fluoropolymers (B111) and (A111) comprise PVDF.

4. (Previously Presented) The film according to claim 1, comprising at least one of (B112) or (A112).

5. (Previously Presented) The film according to claim 1, wherein said polyamide of said layer (B2) is chosen from PA 6, PA 12, and PA 6/6-6.

6. **(Previously Presented)** The film according to claim 1, wherein the functionalized polyolefin of the layer (B3) is grafted polypropylene optionally diluted with polypropylene, EPR rubber, EPDM rubber or copolymers of propylene and of an α-olefin.

7. **(Previously Presented)** The film according to claim 1, wherein the functionalized polyolefin of the layer (B3) results from a co-grafting of a blend of polypropylene and of EPR or EPDM.

8. **(Previously Presented)** A thermoforming multilayer film comprising successively:

- at least one layer chosen from layers (A1) and (A2) with the provision that (A2) is present in said at least one layer and
- is placed next to a layer (B1),
- a layer (B2),
- a layer (B3),
- an optional layer (B4),

wherein said layer (A1) comprises a fluoropolymer (A111) or a polymer (A112) consisting essentially of alkyl(meth)acrylate units or a blend of the two,

said layer (A2) consists essentially of ink,

said layer (B1) comprises a fluoropolymer (B111) or a polymer (B112) consisting essentially of alkyl(meth)acrylate units or a blend of the two, said layer (B2) is based on polyamide with amine end groups, said layer (B3) consists essentially of a polyolefin functionalized with an unsaturated carboxylic anhydride, and

said optional layer (B4) if present comprises polyolefin and wherein the functionalized polyolefin of the layer (B3) is a blend comprising, by weight:

- more than 0 to 50% of at least one polyethylene or one ethylene copolymer,
- 50 to less than 100% of at least one polymer chosen from polypropylene or a propylene copolymer, poly(1-butene) homopolymer or copolymer and polystyrene homopolymer or copolymer,
- wherein said blend is grafted with an unsaturated carboxylic anhydride, and
- wherein said blend is optionally diluted in at least one polyolefin essentially comprising propylene units or in at least one polymer of elastomeric nature or in a blend thereof.

9. (Previously Presented) The film according to claim 1, wherein the polyolefin of layer (B4) is polypropylene.

10. (Previously Presented) A substrate coated with a film according to claim 1, wherein the layer (B3), is next to the substrate.

11. (Previously Presented) The substrate according to claim 10, comprised of polypropylene.

12. (Canceled)

13. (Previously Presented) The film according to claim 1, comprising said layer (B4).

14. (Canceled)

15. (Previously Presented) The film according to claim 2, comprising said layer (B4).

16. (Previously Presented) The film according to claim 8, wherein the functionalized polyolefin of the layer (B3) is a blend comprising, by weight 10 to 40% of at least one polyethylene or one ethylene copolymer,

60 to 90% of at least one polymer chosen from polypropylene or a propylene copolymer, poly(1-butene) homopolymer or copolymer and polystyrene homopolymer or copolymer,

wherein said blend is grafted with an unsaturated carboxylic anhydride, and wherein said grafted blend is optionally diluted in at least one polyolefin essentially comprising propylene units or in at least one polymer or elastomeric nature or in a blend thereof.

17. (Previously Presented) The film according to claim 8, wherein said grafted blend is diluted in at least one polyolefin essentially comprising propylene units or in at least one polymer of elastomeric nature or in a blend thereof.

18. (Previously Presented) The film according to claim 1 produced by a process of co-extrusion.

19. (Previously Presented) The film according to claim 18, wherein said process of co-extrusion is used to produce at least two layers of said film.

20. (Previously Presented) The film according to claim 2, wherein said layers contain impact modifiers, pigments, inks or additives.

21. (Previously Presented) The film according to claim 20, wherein said additive is a UV absorber or antioxidant.

22. (Previously Presented) The film according to claim 2, wherein layers (A11) and (A12) comprise a blend of polymers, exhibiting a transparent, glossy surface which is resistant to chemical or external attack or to UV.

23. (Previously Presented) The film according to claim 1, wherein all of the (A) layers have a total thickness of 1 to 200 μm.

24. (Previously Presented) The film according to claim 23, wherein said layer (A1) has a thickness of 5 to 140 μm.

25. (Previously Presented) A thermoforming multilayer film comprising successively:

layer A111

layer A2

optional layer B1

layer B2

layer B3

optional layer B4

wherein A111 is selected from the group consisting of: PVDF, vinylidene fluoride (VF2) homopolymer, vinylidene fluoride copolymers, trifluoroethylene (VF3) homopolymers and copolymers, and copolymers combining residues of chlorotrifluoroethylene, tetrafluoroethylene, hexafluoropropylene, and/or ethylene units and optionally VF2 and/or VF3,

said layer (A2) consists essentially of ink,

said layer (B1) comprises a fluoropolymer (B111) or a polymer (B112) consisting essentially of alkyl(meth)acrylate units or a blend of the two, said layer (B2) is based on polyamide with amine end groups, said layer (B3) consists essentially of a polyolefin functionalized with an unsaturated carboxylic anhydride, and

said optional layer (B4) if present comprises polyolefin.

26. (Previously Presented) The film according to claim 25, wherein said fluoropolymer (A111) is a blend of polymers.

27. (Previously Presented) The film according to claim 1, wherein said (A112) polymers are present and comprise acid, acid chloride, alcohol, or anhydride functions.

28. (Previously Presented) The film according to claim 1, wherein said film is anisotropic.

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Previously Presented) A process for producing a thermoforming multilayer film comprising co-extruding said layers of claim 1.

36. (Previously Presented) A process for producing a thermoforming multilayer film comprising co-extruding at least two of said layers according to claim 1 and then layering on separately remaining said layers.

37. (Previously Presented) A substrate coated with a film according to claim 1, wherein the layer (B4) is next to the substrate.

38. (Previously Presented) The film according to claim 8, wherein the functionalized polyolefin of the layer (B3) is a blend comprising, by weight:

more than 0 to 50% of at least one polyethylene or ethylene copolymer, and

50 to less than 100% of polypropylene.

39. (Previously Presented) The film according to claim 16, wherein the functionalized polyolefin of the layer (B3) is a blend comprising, by weight:

10 to 40% of at least one polyethylene or ~~one~~ ethylene copolymer, and

60 to 90% of polypropylene.

40. (Previously Presented) A thermoforming multilayer film comprising successively:

- at least one layer chosen from layers (A1) and (A2) such that if (A2)
- is present, then (A2) is placed next to an optional layer (B1),
- an optional layer (B1),
- a layer (B2),
- a layer (B3),
- an optional layer (B4),

wherein said layer (A1) comprises a polymer (A112) consisting essentially of alkyl(meth)acrylate units or a blend thereof with fluoropolymer (A111),

said layer (A2) consists essentially of ink,

said layer (B1) comprises a polymer (B112) consisting essentially of alkyl(meth)acrylate units or a blend thereof with fluoropolymer (B111), said layer (B2) is based on polyamide with amine end groups, said layer (B3) consists essentially of a polyolefin functionalized with an unsaturated carboxylic anhydride, and

said layer (B4) comprises polyolefin, with the provision that said multilayer film does not contain said optional layer (B4).

41. (Previously Presented) A thermoforming multilayer film comprising successively:

- at least one layer chosen from layers (A1) and (A2) such that if (A2)

- is present, then (A2) is placed next to an optional layer (B1),
- an optional layer (B1),
- a layer (B2),
- a layer (B3) placed directly next to (B2),
- an optional layer (B4),

wherein said layer (A1) comprises a fluoropolymer (A111) or a polymer (A112) consisting essentially of alkyl(meth)acrylate units or a blend of the two,

said layer (A2) consists essentially of ink,

said layer (B1) comprises a fluoropolymer (B111) or a polymer (B112) consisting essentially of alkyl(meth)acrylate units or a blend of the two,

said layer (B2) consists of polyamide(s) having amine end groups optionally blended with at least one member selected from the group consisting of polyolefin(s), inorganic filler(s), UV absorber(s), pigment(s) and colorant(s) and mixtures thereof

said layer (B3) consists essentially of a polyolefin functionalized with an unsaturated carboxylic anhydride, and

said optional layer (B4) if present comprises polyolefin.

42. (Previously Presented) A thermoforming multilayer film comprising successively:

- at least one layer chosen from layers (A1) and (A2) such that if (A2)
- is present, then (A2) is placed next to an optional layer (B1),
- an optional layer (B1),
- a layer (B2),
- a layer (B3),

- an optional layer (B4),

wherein said layer (A1) comprises a fluoropolymer (A111) or a polymer (A112) consisting essentially of alkyl(meth)acrylate units or a blend of the two containing at least 50% by weight of (A112),

said layer (A2) consists essentially of ink,

said layer (B1) comprises a fluoropolymer (B111) or a polymer (B112) consisting essentially of alkyl(meth)acrylate units or a blend of the two, said layer (B2) is based on polyamide with amine end groups, said layer (B3) consists essentially of a polyolefin functionalized with an unsaturated carboxylic anhydride, and

said layer (B4) comprises polyolefin, with the provision that said layer (A1) is present and comprises said blend of fluoropolymer (A11) and polymer (A112) consisting essentially of alkyl (meth) acrylate units.

43. (Previously Presented) A thermoforming multilayer film comprising successively:

- at least one layer chosen from layers (A1) and (A2) such that if (A2)
- is present, then (A2) is placed next to an optional layer (B1),
- an optional layer (B1),
- a layer (B2),
- a layer (B3),
- an optional layer (B4),

wherein said layer (A1) comprises a fluoropolymer (A111) or a polymer (A112) consisting essentially of alkyl(meth)acrylate units or a blend of the two,

said layer (A2) consists essentially of ink,

said layer (B1) comprises a fluoropolymer (B111) or a polymer (B112) consisting essentially of alkyl(meth)acrylate units or a blend of the two, said layer (B2) is based on polyamide with amine end groups, said layer (B3) consists essentially of a polyolefin functionalized with an unsaturated carboxylic anhydride, and

said layer (B4) comprises polyolefin, with the provision that layer (A1) is present in the form of two layers (A11) and (A12) wherein (A11) comprises a blend of fluoropolymer (A111) and (A112) consisting essentially of alkyl (meth) acrylate units, and (A12) comprises, by weight, 0 to 50% of (A111) and 50 to 100% of (A112).

44. (Previously Presented) A thermo forming multilayer film according to claim 1, wherein said layer based on polyamide with amine end groups is produced by synthesizing the polyamide in the presence of an excess of diamine or when polyamides and/or copolyamides are manufactured using a lactam or an α-amino carboxylic acid, a diamine or monoamine is employed as a chain limiter.

45. (Currently Amended) A thermo forming multilayer film ~~composition~~ according to claim 1, wherein said polyamide has ~~having~~ substantially only amine end groups.

46. (Previously Presented) A thermoforming multilayer film comprising successively:

- at least one layer chosen from layers (A1) and (A2) with the provision that (A2) is present in said at least one layer and
- is placed next to a layer (B1),

- a layer (B2),
- a layer (B3),
- ~~an~~ a layer (B4),

wherein said layer (A1) is present and comprises layers (A11) and (A12) wherein layer (A11) comprises a fluoropolymer (A111) or a polymer (A112) consisting essentially of alkyl(meth)acrylate units or a blend of (A111) and (A112); and layer (A12) comprises by weight 0 to 50% of (A111) and 50 to 100% of (A112) comprises a fluoropolymer (A111) or a polymer (A112) consisting essentially of alkyl(meth)acrylate units or a blend of the two,

said layer (A2) consists essentially of ink,

said layer (B1) comprises a fluoropolymer (B111) or a polymer (B112) consisting essentially of alkyl(meth)acrylate units or a blend of the two, said layer (B2) is based on polyamide with amine end groups, said layer (B3) consists essentially of a polyolefin functionalized with an unsaturated carboxylic anhydride,

said layer (B4) comprises polyolefin, and

the order of the layers is (A11) + (A12), + (A2), + (B1), + (B2), +(B3), + (B4).

47. (Previously Presented) A thermoforming multilayer film according to claim 1, wherein all of said polyamide end groups consist of amines.

48. (Previously Presented) A thermoforming film according to claim 4 wherein (B112) and (A112) each represent PMMA.

49. (Currently Amended) A thermoforming film according to claim 1 wherein layer (A1) is present and layer (A2) is located beneath ~~layer (B1), or beneath layer~~ (A1)~~, if present~~.

50. (Previously Presented) A process for producing a thermoforming multilayer film comprising co-extruding said layers of claim 2.

51. (Previously Presented) A process for producing a thermoforming multilayer film comprising co-extruding at least two of said layers according to claim 2 and then layering on separately remaining said layers.

52. (Currently Amended) A process according to claim 51, wherein said ~~polyolefin wherein the~~ functionalized polyolefin (B3) is either ~~functionalized in either~~ functionalized polyethylene or functionalized polypropylene.

53. (Currently Amended) A process according to claim ~~52~~ 2, wherein the functionalized polyolefin (B3) is ~~in~~ either functionalized polyethylene or functionalized polypropylene.